

INSPECTION FOR THE PRESENCE OF ASBESTOS-CONTAINING MATERIALS

**Waterbury State Office Complex
Historic Core Building 8/9 North**

May 16, 2013



At the request of the State of Vermont, Department of Buildings and General Services (BGS), Crothers Environmental Group, LLC (CEG) conducted a renovation inspection for the presence of asbestos-containing materials at Historic Core Building 8/9 North located at the Waterbury State Office Complex in Waterbury, Vermont. The inspection was conducted to comply with renovation/demolition requirements set forth by the Vermont Regulations for Asbestos Control (V.S.A Title 18, Chapter 26), the U.S. Environmental Protection Agency Asbestos NESHAP Regulation (40 CFR Part 61 Subpart M) and the Occupational Safety & Health Administration (29 CFR 1926.1101 Construction Standard for Asbestos).

The following materials were found to contain asbestos in concentrations greater than 1%:

- **Plaster walls, ceilings and floors**
- **Pipe and fitting insulation (presumed in wet wall cavities)**
- **Fire door cores**
- **Window glazing and caulk**
- **Door caulk**
- **Black mastic remnant**
- **Vinyl floor sheeting**

ASBESTOS BULK SAMPLING & LABORATORY ANALYSIS

Bulk samples (includes layers) were collected and delivered to EMSL Analytical, Inc. Proper chain-of-custody procedures were followed during transport of samples. EMSL Analytical, Inc. is a Vermont Licensed and US EPA Accredited Laboratory. All samples, unless noted, were analyzed by Polarized Light Microscopy “PLM” in accordance with EPA test method 40 CFR Part 763, Subpart F. The analyst visually estimates the percentages of identified asbestos. The following table provides asbestos bulk sampling information:

TABLE 1
ASBESTOS BULK SAMPLE INVENTORY & ANALYTICAL RESULTS
 November 15, 2012

Sample Number	Homogeneous Material	Sample Location	Analytical Result
200-8/9NB-1	Plaster rough coat	Basement – north wall crawl space entry	3% Chrysotile Asbestos
200-8/9NB-2	Plaster rough coat	Basement – west wall crawl space entry	5% Chrysotile Asbestos
200-8/9NB-3	Plaster rough coat	Basement – east wall crawl space entry	No Asbestos Detected (NAD)
200-8/9NB-4	Green window glazing patch	2 nd floor – room 229	0.5% Chrysotile Asbestos
200-8/9NB-5	Window glazing (white)	2 nd floor – room 224	NAD
200-8/9NB-6	Window glazing (gray)	2 nd floor – room 225	NAD
200-8/9NB-7	Window glazing (white)	2 nd floor – room 221	NAD
200-8/9NB-8	Window glazing (gray)	2 nd floor – room 223	NAD

ASBESTOS BULK SAMPLE INVENTORY & ANALYTICAL RESULTS
 November 6, 2012

Sample Number	Homogeneous Material	Sample Location	Analytical Result
200-8/9N-1	Brown battleship linoleum	1 st floor – south floor – room #122A	NAD
200-8/9N-2	Flooring paper (grey)	1 st floor – room #127	NAD
200-8/9N-3	Flooring paper (grey)	1 st floor – south floor – room #122A	NAD
200-8/9N-4	Brown battleship linoleum	1 st floor – room #127	NAD
200-8/9N-5 Linoleum	4” green linoleum	1 st floor – south side of room #122A	NAD

Sample Number	Homogeneous Material	Sample Location	Analytical Result
200-8/9N-5-Mastic	Yellow glue	1 st floor – south side of room #122A	NAD
200-8/9N-6-Linoleum	4” green linoleum	1 st floor – north wall of room #127	NAD
200-8/9N-6-Mastic	Yellow glue	1 st floor – north wall of room #127	NAD
200-8/9N-7	Window glazing	1 st floor – north end of hall by connector	NAD
200-8/9N-8	Window caulk	1 st floor – north end of hall by connector	3% Chrysotile Asbestos
200-8/9N-9	Door caulking	1 st floor – exit door – south end of hall	4% Chrysotile Asbestos
200-8/9N-10	Fire door core	1 st floor – door to room #123	NAD
200-8/9N-11-Tile	12” x 12” white with tan streaks	1 st floor – top of basement stairwell	NAD
200-8/9N-11-Mastic	Yellow mastic	1 st floor – top of basement stairwell	NAD
200-8/9N-12-Stair tread	Beige stair tread	1 st floor – top of basement stairwell	NAD
200-8/9N-12-Mastic	Tan glue (only)	1 st floor – top of basement stairwell	NAD
200-8/9N-13-Stair tread	Beige stair tread	1 st floor – bottom of basement stairwell	NAD
200-8/9N-14	Joint compound	1 st floor – southwest corner of room #131	NAD
200-8/9N-15	Sheetrock	1 st floor – southwest corner of room #131	NAD
200-8/9N-16	Joint compound	1 st floor – north wall room #132	NAD
200-8/9N-17	Sheetrock	1 st floor – north wall room #132	NAD
200-8/9N-18	Grey floor leveler	1 st floor – north end of hallway	NAD
200-8/9N-19	Plaster – gray rough coat	Basement – wall outside bathroom	NAD
200-8/9N-20	Plaster – white skim coat	Basement – wall outside bathroom	NAD
200-8/9N-21	Plaster – grey rough coat	Basement – wall of entrance to crawlspace	0.25% Chrysotile Asbestos
200-8/9N-22	Plaster – white skim coat	Basement – wall of entrance to crawlspace	NAD
200-8/9N-23	Plaster – grey rough coat	Basement – south wall of hall outside room #034	NAD

Sample Number	Homogeneous Material	Sample Location	Analytical Result
200-8/9N-24	Plaster – white skim coat	Basement – south wall of hall outside room #034	NAD
200-8/9N-25	Plaster – grey rough coat	Basement – north wall of hall outside room #033	NAD
200-8/9N-26	Plaster – white skim coat	Basement – north wall of hall outside room #033	NAD
200-8/9N-27	Plaster – grey rough coat	Basement – south end of hall outside room #028	NAD
200-8/9N-28	Plaster – white skim coat	Basement – south end of hall outside room #028	NAD
200-8/9N-29	Popcorn ceiling	Basement – ceiling in room #023	NAD
200-8/9N-30	Popcorn ceiling	Basement – ceiling in room #028	NAD
200-8/9N-31	Popcorn Ceiling	Basement – south end of hall – outside room #029	NAD
200-8/9N-32	Popcorn ceiling	Basement – large room at south end of hall	NAD
200-8/9N-33	Popcorn ceiling	Basement – ceiling of room #035	NAD
200-8/9N-34 -Leveler	White floor leveler	Basement – center of room #035	NAD
200-8/9N-34 -Mastic	Yellow glue	Basement – center of room #035	NAD
200-8/9N-35 -Leveler	White floor leveler	Basement – east side of room #035	NAD
200-8/9N-35 -Mastic	Yellow glue	Basement – east side of room #035	NAD
200-8/9N-36	Orange mastic remnant	Basement – east side of room #035	NAD
200-8/9N-37	Orange mastic remnant	Basement – east side of room #35	NAD
200-8/9N-38	Black mastic remnant	Basement – center of room #033 (on floor)	4% Chrysotile Asbestos
200-8/9N-39	Black mastic remnant	Basement – north side of room #033 (on floor)	3% Chrysotile Asbestos
200-8/9N-40	White pipe mastic	Basement – on pipes in mechanical room #033	NAD
200-8/9N-41	White pipe mastic	Basement – on pipes north end of hallway	NAD
200-8/9N-42	Window glazing	Basement – west window in room #034	NAD
200-8/9N-43	Window caulk	Basement – west window in room #034	5% Chrysotile Asbestos
200-8/9N-44	Red fire stop	Basement – west wall of mechanical room #038	NAD

Sample Number	Homogeneous Material	Sample Location	Analytical Result
200-8/9N-45	Beige mosaic linoleum remnant	Basement – east bathroom	15% Chrysotile Asbestos
200-8/9N-46	Beige mosaic linoleum remnant	Basement – west bathroom	12% Chrysotile Asbestos
200-8/9N-47	Brown sandstone pattern vinyl flooring	1 st floor – bathroom adjacent to east hallway	NAD
200-8/9N-48	Grey floor leveler	1 st floor – in hall by east stairwell	NAD
200-8/9N-49	Orange carpet glue	1 st floor – under carpet at bottom of east stairwell	NAD
200-8/9N-50-Tile	12” x 12” white with brown streak floor tile	1 st floor – on east stairwell landing	NAD
200-8/9N-50-Mastic	Orange glue	1 st floor – on east stairwell landing	NAD
200-8/9N-51-Stair tread	Beige stair tread	1 st floor – bottom of east stairwell	NAD
200-8/9N-51-Mastic	Glue on beige stair tread	1 st floor – bottom of east stairwell	NAD
200-8/9N-52-Stair tread	Beige stair tread	2 nd floor – top of east stairwell	NAD
200-8/9N-52-Mastic	Glue on beige stair tread	2 nd floor – top of east stairwell	NAD
200-8/9N-53	Grey floor leveler	2 nd floor – south side of room #233	NAD
200-8/9N-54	Door caulking	2 nd floor – exit door at south end of hall	NAD
200-8/9N-55-Covebase	4” green cove base	2 nd floor – north end of hall – east wall	NAD
200-8/9N-55-Mastic	Yellow glue	2 nd floor – north end of hall – east wall	NAD
200-8/9N-56	Orange carpet glue	2 nd floor – north end of hall by connector	NAD
200-8/9N-57	Window glazing	2 nd floor – north wall of room #232	3% Chrysotile Asbestos
200-8/9N-58	Window caulking	2 nd floor – north wall of room #232	NAD

February 27, 2010 - Historic Sampling

Sample Number	Homogeneous Material	Sample Location	Analytical Result
651067-1	Plaster ceiling remnants	1 st floor – room #121 – above lay in ceiling	No Asbestos Detected (NAD)
651067-2	Plaster ceiling remnants	1 st floor – hall by room #123 – above lay in ceiling	NAD
651067-3	Plaster ceiling remnants	1 st floor – room #120 – above lay in ceiling	0.25% Chrysotile Asbestos
651067-4	Plaster ceiling remnants	1 st floor – room #123 – above lay in ceiling	0.25% Chrysotile Asbestos
651067-5	Plaster ceiling remnants	1 st floor – room #129 – above lay in ceiling	0.25% Chrysotile Asbestos
651067-6	Plaster ceiling remnants	1 st floor – room #132 – above lay in ceiling	NAD
651067-7	Plaster ceiling remnants	1 st floor – hall by room #131 – above lay in ceiling	NAD
651067-8	Plaster ceiling remnants	1 st floor – room #133 – above lay in ceiling	0.25% Chrysotile Asbestos

February 15, 2010 Historic Sampling

Sample Number	Homogeneous Material	Sample Location	Analytical Result
99421C-12A	Vinyl floor sheeting – beige mosaic	2 nd floor – end unisex bathroom - center	25% Chrysotile Asbestos
99421C-12B	Glue	2 nd floor – end unisex bathroom - center	NAD
99421C-13	Plaster wall	Attic stairwell – south wall	0.50% Chrysotile Asbestos
99421C-14	Blown-in insulation	Attic – northeast side	NAD
99421C-15	Blown-in insulation	Attic – southwest side	NAD
99421C-16	Black flooring mastic	2 nd floor – hall by room – under carpet	NAD
99421C-17-Gray	Plaster ceiling – gray coat	2 nd floor – room #234 – above lay in ceiling	2% Chrysotile Asbestos
99421C-17-White	Plaster ceiling – white coat	2 nd floor – room #234 – above lay in ceiling	NAD

Sample Number	Homogeneous Material	Sample Location	Analytical Result
99421C-18	2' x 4' lay in ceiling tile patch	2 nd floor – room #234 – west side	NAD
99421C-19	1' x 1' ceiling panel	2 nd floor – room #228 - center	NAD
99421C-20	1' x 1' ceiling tile	2 nd floor – hall by room #227 – above light	NAD
99421C-21	1 ½' x 1 ½' ceiling panel	2 nd floor – room #229 – above light	NAD
99421C-22	1 ½' x 1 ½' ceiling panel	2 nd floor – room #227 – above light	NAD
99421C-23	1' x 2' ceiling panel	2 nd floor – room #220 – above light	NAD
99421C-24	1' x 2' ceiling panel	2 nd floor – room #232 – above light	NAD
99421C-25	Plaster ceiling	2 nd floor – room #233A – above ceiling	NAD
99421C-26	Black flooring mastic	2 nd floor – room #222 – under carpet	NAD
99421C-27-Gray	Plaster wall – gray base coat	1 st floor – hall by room #126 – above ceiling	2% Chrysotile Asbestos
99421C-27-White	Plaster wall – white skim coat	1 st floor – hall by room #126 – above ceiling	NAD
99421C-28	Plaster ceiling remnants	1 st floor – hall by room #126 – above lay in ceiling	NAD
99421C-29	2' x 4' lay in ceiling tile	1 st floor – hall by room #130	NAD
99421C-30-Gray	Plaster wall – gray base coat	1 st floor – bathroom by room #135 – north wall	2% Chrysotile Asbestos
99421C-30-White	Plaster wall – white skim coat	1 st floor – bathroom by room #135 – north wall	NAD

INVENTORY OF CONFIRMED/PRESUMED ASBESTOS-CONTAINING MATERIALS CONTAINING GREATER THAN 1% ASBESTOS:

Homogeneous Area/Material	Material Condition	Material Location	Approximate-Quantity
Plaster walls and ceilings	Good	Throughout building	50,000 sq.ft.
Plaster flooring	Good	Throughout 2 nd floor	3,800 sq.ft.
Non-fiberglass pipe & fitting insulation	Good	Presumed to be in wet wall cavities (if present)	300 ln.ft.
Fire doors	Good	Interior, throughout	10 doors
Window caulking	Good	Basement – west window in room #034 ,1 st floor – windows at north end of hall by connector	90 windows
Door caulking	Good	1 st & 2 nd floor – exit doors on south end of hallway	2 doors
Black mastic remnant	Good	1 st and 2 nd floors	3,300 sq.ft. per floor
Beige vinyl floor sheeting	Damaged	Basement – east & west bathrooms 2 nd floor, end unisex bathroom	Basement 8 sq.ft. 2 nd floor 80 sq.ft.

LIST OF NON-ASBESTOS CONTAINING MATERIALS

The following suspect building materials were sampled and found not to contain asbestos:

- Wall joint compound and sheetrock
- Popcorn ceiling
- Red fire stop
- White pipe insulation mastic
- 12” x 12” White with brown streak floor tile
- 12” x 12” White with tan streaks floor tile
- Beige stair tread
- Brown sandstone pattern vinyl flooring
- 4” Green vinyl flooring
- Green covebase
- Brown battleship vinyl flooring
- Flooring paper (gray)
- Grey floor leveler
- White floor leveler
- Yellow glue
- Yellow mastic
- Tan glue
- Orange mastic remnant
- Orange carpet glue

Friable ACM or Presumed ACM (“PACM”)

Friable ACM or PACM is an asbestos-containing material that when dry can be crumbled, pulverized, or reduced to powder by hand pressure, or a non-friable material that has been made friable by actions such as, but not limited to, sanding, grinding, sawing, abrading, and etc. The following materials were identified as friable ACM:

- ◇ **Plaster walls, ceilings and 2nd floor flooring**
- ◇ **Pipe and fitting insulation**
- ◇ **Fire door cores**
- ◇ **Vinyl floor sheeting**
- ◇ **Beige mosaic linoleum**

The following regulatory agencies have regulations in effect when removing/disturbing friable ACM:

VRAC - V.S.A. Title 18, Chapter 26, requires that all friable ACM that will be disturbed by renovation or demolition activities be properly removed prior to disturbance. VRAC requires the use of Vermont Certified Asbestos Abatement Entities to remove these materials. The work must be performed in accordance with VRAC Section 2.4.2. The Asbestos Abatement Entity must notify the Vermont Department of Health in writing 10 working days prior to commencing removal activities and obtain a Project Permit.

VOSHA Title 29 Code of Federal Regulations (“**CFR**”) 1926.1101 *Asbestos Standard for the Construction Industry* classifies these materials as Class I Asbestos Work. With the exception of respiratory protection, VRAC has more stringent requirements when removing friable ACM.

USEPA Title 40 CFR Part 61 *National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision; Final Rule* regulates the removal of friable ACM whenever 1) a “facility” will be demolished and 2) a “facility” being renovated will disturb quantities in excess of 160 square feet or 260 linear feet. VRAC has more stringent requirements when removing friable ACM. The EPA must be notified 10 working days in advance of asbestos removal and demolition activities.

Non-Friable Asbestos-Containing Materials

Non-friable ACM or PACM is an asbestos-containing material that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure. The following materials were identified as non-friable ACM:

- **Window caulking**
- **Door caulking**
- **Black mastic remnant**
- **Beige mosaic linoleum remnant**

VRAC requires that all non-friable asbestos-containing materials that will be disturbed by demolition activities be properly removed prior to disturbance. Vinyl floor tiles & mastics and roofing materials can be removed in accordance with VRAC Section 6 (less stringent work practice

requirements). Vermont licensed asbestos abatement personnel are not required. In short, the removal procedures include but do not limit:

- ◆ adequately wetting the material;
- ◆ removing the material in as large of sections as feasible; and
- ◆ properly packaging, labeling, transporting and disposing of the material.

The material cannot be sanded, sawn, chipped, ground, abraded or drilled.

NOTE: the Vermont Department of Health does not provide an exemption for any non-friable materials not specifically listed under VRAC Section 6, including caulks and sealants

OSHA classifies these materials as Class II. OSHA has more stringent requirements than VRAC Section 6, requiring a “Competent Person” (asbestos abatement supervisor with a minimum 40 hour asbestos supervisor training course) as well as producing a negative exposure assessment.

USEPA requirements do not apply (with the exception of the demolition notification if applicable) unless the non-friable ACM is subjected to sanding, sawing, chipping, grinding, abrading or drilling. The EPA must be notified 10 working days in advance of the demolition activities (with a copy sent to the Vermont Department of health, Asbestos & Lead Control Program). A “Competent Person” with asbestos supervisor training should be onsite during the demolition activities.

ASBESTOS HAZARD COMMUNICATION REQUIREMENTS

This section applies to the communication of information concerning asbestos hazards in construction & general industry to facilitate compliance with OSHA 1926.1101 (construction) and 1910.1001 (general industry). Building owners are often the only and/or best sources of information concerning the presence of previously installed ACM. Therefore they, along with employers of potentially exposed employees, are assigned specific duties for hazard communication.

Building and/or facility owners shall notify the following persons of the presence, location and quantity of ACM or PACM, at the work sites in their buildings and facilities. Notification shall be either in writing, or shall consist of a personal communication between the owner and the person to whom notification must be given or their authorized representatives:

- Prospective employers applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material;
- Employees of the owner who will work in or adjacent to areas containing such material; and
- On multi-employer worksites, all employers of employees who will be performing work within or adjacent to areas containing such material.

Disclaimer: Some suspect materials may be present in locations such as behind walls, in chases, above rigid ceilings, inside crawl spaces, etc. that were not visible or accessible to the Inspector. In the event suspect materials not identified in this report are discovered through demolition activities, the discovered material must be presumed as asbestos-containing and treated accordingly.

Please call our office at 802-888-1936 if you have any questions regarding this report or if you need further information.

Signed,



R. Chris Crothers, Principal / Vermont Licensed Asbestos Inspector
Crothers Environmental Group, LLC

Attachments: Asbestos Bulk Sample Chain of Custody
Laboratory Analysis Sheets
Consultant & Laboratory License Copies

cc:  CEG888200-8/9N



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
<http://www.emsl.com> / cinnaslab@EMSL.com

EMSL Order ID: 041230055
Customer ID: CROT30
Customer PO:
Project ID:

Attn: Chris Crothers
Crothers Environmental Group
29 Duncan Road
Morrisville, VT 05661

Phone: (802) 888-1936
Fax: (ema) il -only
Collected: 11/15/2012
Received: 11/19/2012
Analyzed: 11/27/2012

Proj: 888200-8/9/ NB WATERBURY STATE OFFICE COMPLEX- 103 SOUTH MAIN STREET- 8/9 NORTH-THROUGHOUT

Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9NB-1

Lab Sample ID: 041230055-0001

Sample Description: BASEMENT- N. WALL CRAWLSPACE ENTRY/PLASTER ROUGH COAT

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/26/2012	Brown	0%	98%	2% Chrysotile	

Client Sample ID: 888200-8/9NB-2

Lab Sample ID: 041230055-0002

Sample Description: BASEMENT- W. WALL CRAWLSPACE ENTRY/PLASTER ROUGH COAT

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/26/2012	Brown	0%	95%	5% Chrysotile	

Client Sample ID: 888200-8/9NB-3

Lab Sample ID: 041230055-0003

Sample Description: BASEMENT- E. WALL CRAWLSPACE ENTRY/PLASTER ROUGH COAT

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/27/2012	Gray	1%	99%	None Detected	Samples are not homogeneous

Client Sample ID: 888200-8/9NB-4

Lab Sample ID: 041230055-0004

Sample Description: 2ND FLOOR- ROOM 229/GREEN WINDOW GLAZING PATCH

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
400 PLM Pt Ct	11/27/2012	Green	0%	99.50%	0.50% Chrysotile	

Client Sample ID: 888200-8/9NB-5

Lab Sample ID: 041230055-0005

Sample Description: 2ND FLOOR- ROOM 224/WINDOW GLAZING (WHITE)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/27/2012	Tan/White	0%	100%	None Detected	

Client Sample ID: 888200-8/9NB-6

Lab Sample ID: 041230055-0006

Sample Description: 2ND FLOOR- ROOM 225/WINDOW GLAZING (GREY)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/27/2012	Gray	0%	100%	None Detected	

Client Sample ID: 888200-8/9NB-7

Lab Sample ID: 041230055-0007

Sample Description: 2ND FLOOR- ROOM 221/WINDOW GLAZING (WHITE)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/27/2012	Gray/Tan	0%	100%	None Detected	



EMSL Analytical, Inc.

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EMSL Order ID: 041230055
Customer ID: CROT30
Customer PO:
Project ID:

Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9NB-8

Lab Sample ID: 041230055-0008

Sample Description: 2ND FLOOR- ROOM 233/WINDOW GLAZING (GREY)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/27/2012	Gray	0%	100%	None Detected	

PLM: Cert #PB091886 (JP)-Cert #PB016724

PLM 400 Point Count: Cert #PB091886 (JP)-Cert #PB016724

Analyst(s)

Dave Poitras	PLM	(2)
Frank Dicrescenzo	PLM	(2)
Juli Patel	PLM	(3)
	400 PLM Pt Ct	(1)

Stephen Siegel, CIH, Laboratory Manager
or other Approved Signatory

Any questions please contact Steve Siegel.

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. This test report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. EMSL bears no responsibility for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples. PLM alone is not consistently reliable in detecting asbestos in floor coverings and similar NOBs

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from: 11/27/2012 09:37:51

To:

200 Rt. 130 North

Cinnaminson, NJ 08077

Date Samples Collected: 11 / 15 / 12

Account Representative: Ellen Podell

Samples Collected By: Chris Clement

CEG Project No.: 888200-819 NB Project Name: Waterbury State Office Complex – 103 South Main Street

Work Area: 8/9 North - throughout (misc. materials)

E-Mail Results to: chris@crothersenvironmental.com

Analysis Requested: Polarized Light Microscopy

Method of Shipment: FedEx

[illegible]

82

041230055

~~June 16, 2011~~

[illegible]

Turnaround Time: by Noon Same Day 24 Hour 48 Hour 72 Hour 10 day

Point count if asbestos content is found to be less than 2%

Relinquished by: Chris Chz Date: 11/15/12

Rec'd EMSL FX 9:00 AM
11-19-2012



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
<http://www.emsl.com> / cinnaslab@EMSL.com

EMSL Order ID: 041229196
Customer ID: CROT30
Customer PO:
Project ID: WSOC

Attn: Chris Clement
Crothers Environmental Group
29 Duncan Road
Morrisville, VT 05661

Phone: (802) 888-1936
Fax: (ema) il -only
Collected: 11/ 6/2012
Received: 11/08/2012
Analyzed: 11/14/2012

Proj: 888200-8/9N Waterbury State Office Complex-103 South Main Street, Throughout Building 8/9 North (WSOC)

Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9N-1

Lab Sample ID: 041229196-0001

Sample Description: 1st floor-S floor rm #122A/brown battleship linoleum

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Brown	20%	80%	None Detected	

Client Sample ID: 888200-8/9N-2

Lab Sample ID: 041229196-0002

Sample Description: 1st floor-rm #127/flooring paper (grey)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	75%	25%	None Detected	

Client Sample ID: 888200-8/9N-3

Lab Sample ID: 041229196-0003

Sample Description: 1st floor-S floor rm #122A/flooring paper (grey)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	85%	15%	None Detected	

Client Sample ID: 888200-8/9N-4

Lab Sample ID: 041229196-0004

Sample Description: 1st floor-rm #127/brown battleship linoleum

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Brown	20%	80%	None Detected	

Client Sample ID: 888200-8/9N-5-Linoleum

Lab Sample ID: 041229196-0005

Sample Description: 1st floor-S floor rm #122A/4" green linoleum & yellow glue (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Green	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-5-Mastic

Lab Sample ID: 041229196-0005A

Sample Description: 1st floor-S floor rm #122A/4" green linoleum & yellow glue (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-6-Linoleum

Lab Sample ID: 041229196-0006

Sample Description: 1st floor-N wall rm 127/4" green linoleum & yellow glue (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Green	0%	100%	None Detected	



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Project ID: WSOC

Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9N-6-Mastic **Lab Sample ID:** 041229196-0006A

Sample Description: 1st floor-N wall rm 127/4" green linoleum & yellow glue (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-7 **Lab Sample ID:** 041229196-0007

Sample Description: 1st floor-window N end of hall by connector/window glazing (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	Recommend TEM

Client Sample ID: 888200-8/9N-8 **Lab Sample ID:** 041229196-0008

Sample Description: 1st floor-window N end of hall by connector/window caulking (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	0%	97%	3% Chrysotile	

Client Sample ID: 888200-8/9N-9 **Lab Sample ID:** 041229196-0009

Sample Description: 1st floor-exit door S end of hall/door caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray/White	0%	96%	4% Chrysotile	

Client Sample ID: 888200-8/9N-10 **Lab Sample ID:** 041229196-0010

Sample Description: 1st floor-door rm #123/fire door core

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	15%	85%	None Detected	

Client Sample ID: 888200-8/9N-11-tile **Lab Sample ID:** 041229196-0011

Sample Description: 1st floor-top of basement stairwell/12x12 white w/ tan streaks FT

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-11-mastic **Lab Sample ID:** 041229196-0011A

Sample Description: 1st floor-top of basement stairwell/yellow mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-12-stair tread **Lab Sample ID:** 041229196-0012

Sample Description: 1st floor-top of basement stairwell/beige stair tread

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9N-12-mastic

Lab Sample ID: 041229196-0012A

Sample Description: 1st floor-top of basement stairwell/tan glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-13-stair tread

Lab Sample ID: 041229196-0013

Sample Description: 1st floor-bottom of basement stairwell/beige stair tread

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-13-mastic

Lab Sample ID: 041229196-0013A

Sample Description: 1st floor-bottom of basement stairwell/tan glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-14

Lab Sample ID: 041229196-0014

Sample Description: 1st floor-SW corner rm #131/JC

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-15

Lab Sample ID: 041229196-0015

Sample Description: 1st floor-SW corner rm #131/SR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	10%	90%	None Detected	

Client Sample ID: 888200-8/9N-16

Lab Sample ID: 041229196-0016

Sample Description: 1st floor-N wall rm #132/JC

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-17

Lab Sample ID: 041229196-0017

Sample Description: 1st floor-N wall rm #132/SR

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	10%	90%	None Detected	

Client Sample ID: 888200-8/9N-18

Lab Sample ID: 041229196-0018

Sample Description: 1st floor-N end of hallway/grey floor leveler

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	5%	95%	None Detected	



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Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9N-19

Lab Sample ID: 041229196-0019

Sample Description: Basement-wall outside bathroom/plaster grey rough coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	5%	95%	None Detected	

Client Sample ID: 888200-8/9N-20

Lab Sample ID: 041229196-0020

Sample Description: Basement-wall outside bathroom/plaster white skim coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-21

Lab Sample ID: 041229196-0021

Sample Description: Basement-entrance to crawlspace wall/plaster grey rough coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
400 PLM Pt Ct	11/13/2012		0%	99.75%	0.25% Chrysotile	

Client Sample ID: 888200-8/9N-22

Lab Sample ID: 041229196-0022

Sample Description: Basement-entrance to crawlspace wall/plaster white skim coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-23

Lab Sample ID: 041229196-0023

Sample Description: Basement-S wall of hall outside rm 034/plaster grey rough coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-24

Lab Sample ID: 041229196-0024

Sample Description: Basement-S wall of hall outside rm 034/plaster white skim coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-25

Lab Sample ID: 041229196-0025

Sample Description: Basement-N wall of hall outside rm 033/plaster grey rough coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-26

Lab Sample ID: 041229196-0026

Sample Description: Basement-N wall of hall outside rm 033/plaster white skim coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	



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Client Sample ID: 888200-8/9N-27

Lab Sample ID: 041229196-0027

Sample Description: Basement-S end of hall outside rm 028/plaster grey rough coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	Gray	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-28

Lab Sample ID: 041229196-0028

Sample Description: Basement-S end of hall outside rm 028/plaster white skim coat

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-29

Lab Sample ID: 041229196-0029

Sample Description: Basement-ceiling rm #023/popcorn ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	Sample contains vermiculite

Client Sample ID: 888200-8/9N-30

Lab Sample ID: 041229196-0030

Sample Description: Basement-ceiling rm #028/popcorn ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	Sample contains vermiculite

Client Sample ID: 888200-8/9N-31

Lab Sample ID: 041229196-0031

Sample Description: Basement-S end of hall outside rm 029/popcorn ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-32

Lab Sample ID: 041229196-0032

Sample Description: Basement-large room S end of hall/popcorn ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012		0%	100%	None Detected	

Client Sample ID: 888200-8/9N-33

Lab Sample ID: 041229196-0033

Sample Description: Basement-ceiling of rm #035/popcorn ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-34-leveler

Lab Sample ID: 041229196-0034

Sample Description: Basement-center of rm #035/white floor leveler

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	



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Client Sample ID: 888200-8/9N-34-mastic

Lab Sample ID: 041229196-0034A

Sample Description: Basement-center of rm #035/yellow glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-35-leveler

Lab Sample ID: 041229196-0035

Sample Description: Basement-E side of rm #035/white floor leveler

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-35-mastic

Lab Sample ID: 041229196-0035A

Sample Description: Basement-E side of rm #035/yellow glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-36

Lab Sample ID: 041229196-0036

Sample Description: Basement-E side of rm #035/orange mastic remnant

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-37

Lab Sample ID: 041229196-0037

Sample Description: Basement-center of rm #035/orange mastic remnant

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-38

Lab Sample ID: 041229196-0038

Sample Description: Basement-center of rm #033 (on floor)/black mastic remnant

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Black	0%	96%	4% Chrysotile	

Client Sample ID: 888200-8/9N-39

Lab Sample ID: 041229196-0039

Sample Description: Basement-N side of rm #033 (on floor)/black mastic remnant

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	Black	0%	97%	3% Chrysotile	

Client Sample ID: 888200-8/9N-40

Lab Sample ID: 041229196-0040

Sample Description: Basement-on pipes in mech rm #033/white pipe mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	White	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9N-41

Lab Sample ID: 041229196-0041

Sample Description: Basement-on pipes N end of hall/white pipe mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	White	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-42

Lab Sample ID: 041229196-0042

Sample Description: Basement-W window in rm #034/window glazing

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-43

Lab Sample ID: 041229196-0043

Sample Description: Basement-W window in rm #034/window caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	95%	5% Chrysotile	

Client Sample ID: 888200-8/9N-44

Lab Sample ID: 041229196-0044

Sample Description: Basement-West wall of mech rm #033/red firestop (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Red	10%	90%	None Detected	

Client Sample ID: 888200-8/9N-45

Lab Sample ID: 041229196-0045

Sample Description: Basement-E bathroom in basement/beige mosaic linoleum remnant

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	0%	85%	15% Chrysotile	

Client Sample ID: 888200-8/9N-46

Lab Sample ID: 041229196-0046

Sample Description: Basement-W bathroom in basement/beige mosaic linoleum remnant

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	Gray/Tan	0%	88%	12% Chrysotile	

Client Sample ID: 888200-8/9N-47

Lab Sample ID: 041229196-0047

Sample Description: 1st floor-bathroom adj to East stairwell/brown sandstone pattern vinyl flooring

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	10%	90%	None Detected	

Client Sample ID: 888200-8/9N-48

Lab Sample ID: 041229196-0048

Sample Description: 1st floor-in hall by E stairwell/grey floor leveler (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	100%	None Detected	



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Client Sample ID: 888200-8/9N-49

Lab Sample ID: 041229196-0049

Sample Description: 1st floor-under carpet bottom of E stairwell/orange carpet glue (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-50-tile

Lab Sample ID: 041229196-0050

Sample Description: 1st floor-on E stairwell landing/12x12 white w/ brown streak FT

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-50-mastic

Lab Sample ID: 041229196-0050A

Sample Description: 1st floor-on E stairwell landing/orange glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-51-stair tread

Lab Sample ID: 041229196-0051

Sample Description: 1st floor-bottom of E stairwell/beige stair tread

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-51-mastic

Lab Sample ID: 041229196-0051A

Sample Description: 1st floor-bottom of E stairwell/glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-52-stair tread

Lab Sample ID: 041229196-0052

Sample Description: 2nd floor-top of E stairwell/beige stair tread

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	Beige	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-52-mastic

Lab Sample ID: 041229196-0052A

Sample Description: 2nd floor-top of E stairwell/glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/14/2012	Yellow/Clear	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-53

Lab Sample ID: 041229196-0053

Sample Description: 2nd floor-S side of rm #233/grey floor leveler

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis via EPA 600/R-93/116 and/or EPA 600/M4-82-020

Client Sample ID: 888200-8/9N-54

Lab Sample ID: 041229196-0054

Sample Description: 2nd floor-exit door S end of hall/door caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Gray	0%	96%	4% Chrysotile	

Client Sample ID: 888200-8/9N-55-covebase

Lab Sample ID: 041229196-0055

Sample Description: 2nd floor-N end of hall, E wall/4" green covebase

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Green	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-55-mastic

Lab Sample ID: 041229196-0055A

Sample Description: 2nd floor-N end of hall, E wall/yellow glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-56

Lab Sample ID: 041229196-0056

Sample Description: 2nd floor-N end of hall by connector/orange carpet glue (only)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Yellow	0%	100%	None Detected	

Client Sample ID: 888200-8/9N-57

Lab Sample ID: 041229196-0057

Sample Description: 2nd floor-N wall of rm #232/window glazing

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Tan/White	0%	97%	3% Chrysotile	

Client Sample ID: 888200-8/9N-58

Lab Sample ID: 041229196-0058

Sample Description: 2nd floor-N wall of rm #232/window caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/13/2012	Red	0%	100%	None Detected	

PLM: Certification #PB812016 (SR) & #PB812017 (CB)

PLM 400 Point Count: Certification #PB812016 (SR) & #PB812017 (CB)

Analyst(s)

Chelsey Bilhear	PLM	(18)
Samantha Rundstorm	PLM	(50)
	400 PLM Pt Ct	(1)

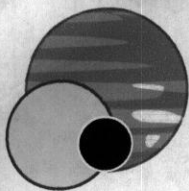
Stephen Siegel, CIH, Laboratory Manager
or other Approved Signatory

Any questions please contact Steve Siegel.

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. This test report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. EMSL bears no responsibility for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples. PLM alone is not consistently reliable in detecting asbestos in floor coverings and similar NOBs

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from: 11/14/2012 06:21:16



041229196

Crothers Environmental Group, LLC

29 Duncan Road

Morrisville, Vermont 05661

Phone 802-888-1936

info@crothersenvironmental.com

CHAIN OF CUSTODY "ASBESTOS" VERMONT SAMPLES

To:

EMSL Analytical

200 Rt. 130 North

Cinnaminson, NJ 08077

Date Samples Collected:

Account Representative:

Ellen Podell

Samples Collected By:

CEG Project No.: 888200 - 8/9N Project Name: Waterbury State Office Complex - 103 South Main Street

Work Area: throughout Building: 8/9 NorthE-Mail Results to: chris@crothersenvironmental.com

Analysis Requested: Polarized Light Microscopy

Method of Shipment: FedEx

Sample #	Sample Description, Homogenous Area	Sample Location
888200-8/9N-1	brown battleship linoleum	1st floor - S. floor rm #122A
-2	flooring paper (grey)	- Rm #127
-3	"	- S. floor rm #122A
-4	brown battleship linoleum	- Rm #127
-5	4" green linoleum + yellow glue (only)	- S. side of rm 122A
-6	"	- N. wall rm 127
-7	window glazing (only)	- window N. end of hall by corner
-8	window caulking (only)	- "
-9	door caulking	- exit door S. end of hall
-10	Fire door core	- door rm #123
-11	12x12 white w/ tan streaks ET + yellow mastic	- Top of basement stairwell
-12	beige stair tread + tan glue (only)	- "
-13	"	- bottom of basement stairwell
-14	JC	- SW corner rm #132
-15	SR	- "
-16	JC	- N. wall rm #132
-17	SR	- "
-18	grey floor leveler	✓ - N. end of hallway
-19	Plaster grey roughcoat	Basement - wall outside Bathroom
-20	Plaster white skim coat	- "
-21	Plaster grey roughcoat	- Entrance to crawlspace w/ "
-22	Plaster white skim coat	✓ - "

LDD: VE EMSL Rf 11/8/12 9:30

Pg 1

58

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 2012/11/08 AM 11:11

Sample #	Sample Description, Homogenous Area	Sample Location
888200-8/9N-23	Plaster grey rough coat	basement- S. wall of hall outside rm 034
-24	Plaster white skim coat	- " " "
-25	Plaster grey rough coat	- N. wall of hall outside rm 033
-26	Plaster white skim coat	- " " "
-27	Plaster grey rough coat	- S. end of hall outside rm 028
-28	Plaster white skim coat	- " " "
-29	Popcorn ceiling	- Ceiling rm # 027 023
-30	" "	- ceiling rm # 028
-31	" "	- S. end of hall outside rm 029
-32	" "	- Large room S. end of hall
-33	" "	- ceiling rm # 035
-34	white floor leveler + yellow glue	- Center of rm # 035
-35	" "	- E. side of rm # 035
-36	Orange mastic remnant	- " " "
-37	" "	- Center of rm # 035
-38	Black mastic remnant	- Center of rm # 033 (on floor)
-39	" "	- N. side of rm # 033 (on floor)
-40	White pipe mastic	- On pipes in mech. rm # 033
-41	" "	- on pipes N. end of hall
-42	window glazing	- W. window in rm # 034
-43	Window caulking	- " " "
-44	red firestop (only)	- west wall of mech. rm # 033
-45	Beige mosaic linoleum remnant	- E. bathroom in basement
-46	" "	- W. bathroom in basement
-47	brown sandstone pattern vinyl flooring (only)	- Bathroom adj to east stairwell
-48	grey floor leveler (only)	- In hall by E. stairwell

Turnaround Time: by Noon Same Day 24 Hour 48 Hour 72 Hour

10 day
5

Point count if asbestos content is found to be less than 2%

Relinquished by:

Chris O'Connell

Date: 11/6/12

More on next page

Pg 2

To: ***EMSL Analytical***
200 Rt. 130 North
Cinnaminson, NJ 08077

Account Representative: Ellen Podell

~~Samples Collected By:~~

Project Name: Waterbury State Office Complex – 103 South Main Street

Work Area:

Analysis Requested: Polarized Light Microscopy

Method of Shipment: FedEx

[illegible]

RECEIVED
EMSL
CINNAMINSON, N.J.
2012 NOV -8 AM 11:1

**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: bostonlab@emsl.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 02/16/10 9:43 AM
EMSL Order: 131000552

Fax: Phone: (802) 888-1936
Project: **CEG Proj# 99421 / WaterburyState Office Complex;**
Waterbury, VT

EMSL Proj:
Analysis Date: 2/18/2010

**Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116. Quantitation
using 400 Point Count Procedure.**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
99421C-13	Plaster Wall; 8-9 N	Gray		99.50% Non-fibrous (other)	0.50% Chrysotile
131000552-0020	Attic Stairwell South Wall	Non-Fibrous Homogeneous			

Analyst(s)

Steve Grise (1)

Renaldo Drakes
or other approved signatory

Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. 7 Constitution Way, Suite 107, Woburn MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

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24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 02/16/10 9:43 AM
EMSL Order: 131000552

Fax: Phone: (802) 888-1936
Project: **CEG Proj# 99421 / Waterbury State Office Complex;**
Waterbury, VT

EMSL Proj:
Analysis Date: 2/18/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
99421C-1A 131000552-0001	Plaster Wall; Gray; A Bld 1st Fl Rm 114C West Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-1B 131000552-0002	Plaster Wall; White; A Bld 1st Fl Rm 114C W Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-2 131000552-0003	2x4 Lay In CT; A Bld 1st Fl Rm 114C West Side	Gray/White Fibrous Heterogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected
99421C-3 131000552-0004	2x4 Lay In CT; A Bld 1st Fl Rm 114C East Side	Gray Fibrous Homogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected
99421C-4 131000552-0005	2x4 Lay In CT; A Bld 1st Fl Rm 109 North Side	Gray Fibrous Homogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected
99421C-5A 131000552-0006	Plaster Ceiling; Gray; A Bld 1st Fl Janitor Closet	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-5B 131000552-0007	Plaster Ceiling; Whit; A Bld 1st Fl Janitor Closet	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Steve Grise (39)

Renaldo Drakes
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. 7 Constitution Way, Suite 107, Woburn MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

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Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 02/16/10 9:43 AM
EMSL Order: 131000552

Fax: Phone: (802) 888-1936
Project: **CEG Proj# 99421 / Waterbury State Office Complex;**
Waterbury, VT

EMSL Proj:
Analysis Date: 2/18/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
99421C-6 131000552-0008	2x4 Lay in Ceiling Patch Tile; A Bld 1st Fl Rm 106	Gray/White Fibrous Heterogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected
99421C-7 131000552-0009	Plaster Ceiling Patch; A Bld 2nd Fl Womens Rm 201A	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-8A 131000552-0010	Plaster Ceiling; Gray; A Bld 2nd Fl Rm 201 SE Cnr	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-8B 131000552-0011	Plaster Ceiling; White; A Bld 2nd Fl Rm 201 SE Cnr	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-9A 131000552-0012	Plaster Ceiling; Gray; A Bld 2nd Fl Womens Rm Clg	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-9B 131000552-0013	Plaster Ceiling; White; A Bld 2nd Fl Womens Rm Clg	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-10A 131000552-0014	Plstr Wall; Gry; A Bld 2nd Fl Attic Ent Rm S Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Renaldo Drakes
or other approved signatory

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Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
 Customer PO:
 Received: 02/16/10 9:43 AM
 EMSL Order: 131000552

Fax: Phone: (802) 888-1936
 Project: **CEG Proj# 99421 / Waterbury State Office Complex;**
Waterbury, VT

EMSL Proj:
 Analysis Date: 2/18/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
99421C-10B 131000552-0015	Plstr Wall; Wht; A Bld 2nd Fl Attic Ent Rm S Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-11A 131000552-0016	Vinyl Floor Sheeting; Beige Mosaic; 8 N 2nd Fl End	Beige Fibrous Heterogeneous		75% Non-fibrous (other)	25% Chrysotile
99421C-11B 131000552-0017	Vinyl Floor Sheeting; Glue; 8 N 2nd Fl End Unisex	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-12A 131000552-0018	Vinyl Fl Sheeting; Beige Mosaic; 8-9 N 2nd Fl End	Beige Fibrous Heterogeneous		75% Non-fibrous (other)	25% Chrysotile
99421C-12B 131000552-0019	Vinyl Fl Sheeting; Glue; 8-9 N 2nd Fl End Unisex	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-14 131000552-0021	Blown in Insulation; 8-9 N Attic NE Side	White/Pink Fibrous Homogeneous	95% Min. Wool	5% Non-fibrous (other)	None Detected
99421C-15 131000552-0022	Blown in Insulation; 8-9 N SW Side	White/Pink Fibrous Homogeneous	95% Min. Wool	5% Non-fibrous (other)	None Detected

Analyst(s)

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Renaldo Drakes
 or other approved signatory

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Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 02/16/10 9:43 AM
EMSL Order: 131000552

Fax: Phone: (802) 888-1936
Project: **CEG Proj# 99421 / Waterbury State Office Complex;**
Waterbury, VT

EMSL Proj:
Analysis Date: 2/18/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
99421C-16 131000552-0023	Black Flooring Mastic; 8-9 N 2nd FI Hall by Rm	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-17 Gray 131000552-0024	Plaster Ceiling; Gray; 8-9 N 2nd FI Rm 234	Gray Non-Fibrous Homogeneous	<1% Hair	98% Non-fibrous (other)	2% Chrysotile
99421C-17 White 131000552-0025	Plaster Ceiling; White; 8-9 N 2nd FI Rm 234	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-18 131000552-0026	2x4 Lay in Ceiling Tile Patch; 8-9 N 2nd FI Rm 234	Gray/White Fibrous Heterogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected
99421C-19 131000552-0027	1x1 Ceiling Panel; 8-9 N 2nd FI Rm 228 Center	Tan/White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
99421C-20 131000552-0028	1x1 Ceiling Tile; 8- 9 N 2nd FI Hall by Rm 227	Tan Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
99421C-21 131000552-0029	1.5x1.5 Ceiling Panel; 8-9 N 2nd FI Rm 229	Tan/White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected

Analyst(s)

Steve Grise (39)

Renaldo Drakes
or other approved signatory

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Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 02/16/10 9:43 AM
EMSL Order: 131000552

Fax: Phone: (802) 888-1936
Project: **CEG Proj# 99421 / Waterbury State Office Complex;**
Waterbury, VT

EMSL Proj:
Analysis Date: 2/18/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
99421C-22 131000552-0030	1.5x1.5 Ceiling Panel; 8-9 N 2nd FI Rm 227	Tan/White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
99421C-23 131000552-0031	1x2 Ceiling Panel; 8-9 N 2nd FI Rm 220	Tan/White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
99421C-24 131000552-0032	1x2 Ceiling Panel; 8-9 N 2nd FI Rm 232	Tan/White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
99421C-25 131000552-0033	Plaster Ceiling; 8-9 N 2nd FI Rm 233A	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
99421C-26 131000552-0034	Black Flooring Mastic 8-9 N 2nd FI Rm 222	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-27-Gray Base Coat 131000552-0035	Plaster Wall; 8-9 N 1st FI Hall by Rm 126	Gray Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
99421C-27-White Skim Coat 131000552-0035A	Plaster Wall; 8-9 N 1st FI Hall by Rm 126	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Steve Grise (39)

Renaldo Drakes
or other approved signatory

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Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 02/16/10 9:43 AM
EMSL Order: 131000552

Fax: Phone: (802) 888-1936
Project: **CEG Proj# 99421 / Waterbury State Office Complex;**
Waterbury, VT

EMSL Proj:
Analysis Date: 2/18/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
99421C-28 131000552-0036	Plaster Ceiling Rem; 8-9 N 1st Fl Hall by Rm 126	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
99421C-29 131000552-0037	2x4 Lay in Clg Tile; 8-9 N 1st Fl Hall by Rm 130	White Fibrous Homogeneous	25% Cellulose 35% Min. Wool	40% Non-fibrous (other)	None Detected
99421C-30 Gray 131000552-0038	Plstr Wall; Gray; 8- 9 N 1st Fl Bathrm by Rm 135 N	Gray Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
99421C-30 White 131000552-0039	Plstr Wall; Gray; 8- 9 N 1st Fl Bathrm by Rm 135 N	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Steve Grise (39)

Renaldo Drakes
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. 7 Constitution Way, Suite 107, WoburnMA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

**EMSL Analytical, Inc.**

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800

Fax: (856) 858-4960

Email: westmontaslab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 03/02/10 10:30 AM
EMSL Order: 041004062

Fax: Phone: (802) 888-1936
Project: **651067/ WATERBURY STATE OFFICE COMPLEX,**
WATERBURY, VT

EMSL Proj:
Analysis Date: 3/4/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
651067-1 041004062-0001	8-9 NORTH 1ST FLOOR-RM 121-ABOVE LAY IN CEILING	Gray Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
Suggest TEM					
651067-2 041004062-0002	8-9 NORTH 1ST FLOOR-HALL RM 123-ABOVE LAY IN CLG	Gray Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
Suggest TEM					
651067-6 041004062-0006	8-9 NORTH 1ST FLOOR-RM 132-ABOVE LAY IN CEILING	Gray Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
Suggest TEM					
651067-7 041004062-0007	8-9 NORTH 1ST FLOOR-HALL RM 131-ABOVE LAY IN CLG	Gray Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
Suggest TEM					

CERTIFICATION# PB278780

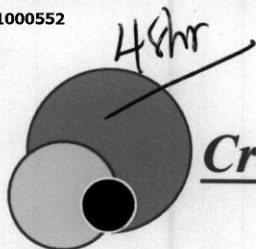
Analyst(s)

Chris Little (4)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The test results meet all NELAC requirements unless otherwise specified.

Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., WestmontNJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006



131000552

BY: SA 0943

FEB 16 2010

798389902064

24 Langdell Road

Morrisville, Vermont 05661

Phone 802-888-1936

info@crothersenvironmental.com

Crothers Environmental Group, LLC

CHAIN OF CUSTODY "ASBESTOS" VERMONT SAMPLES

To: **EMSL Analytical**
7 Constitution Way
Woburn, MA 04801

Date Samples Collected: February 15, 2010
Account Representative: Ellen Podell
Samples Collected By: R. Chris Crothers

CEG Project No.: 99421

Project Name: Waterbury State Office Complex - Waterbury, Vermont

Work Area:

E-Mail Results to: chris@crothersenvironmental.com

Analysis Requested: Polarized Light Microscopy

Method of Shipment: FedEx

Sample #	Sample Description, Homogenous Area	Sample Location
1-2 99421C-1	Plaster wall - Gray + white coat	"A" Bldg - 1st Floor Room 114C - west wall
3 99421C-2	2x4 Lay-in CT - worm groove pattern	- west side
4 99421C-3	" " " " "	east side
5 99421C-4	" " " " "	Room 109 - North side
6-7 99421C-5	Plaster ceiling - Gray + white coat	Janitor's closet (by Men's Room)
8 99421C-6	2x4 Lay-in ceiling tile Patch	Room 106
9 99421C-7	Plaster Ceiling Patch	2nd Floor - Women's Room in 201A
10-11 99421C-8	Plaster ceiling - Gray + white coats	- Room 201 - SE Corner
12-13 99421C-9	" " " " "	- Women's Room ceiling
14-15 99421C-10	" Wall " " "	- Attic entrance Room - South wall
16-17 99421C-11	Vinyl Floor Sheeting - Beige mosaic	8th North - 2nd floor - Ext Unisex bathroom - N. side
18-19 99421C-12	" " " " " & Blue	8-9 North 2nd floor - " " " - Center
20 99421C-13	Plaster wall	- Attic stairwell - South wall
21 99421C-14	Blown in Insulation	- Attic - NE side
22 99421C-15	" " "	- Attic SW side
23 99421C-16	Black Flooring mastic	- 2nd floor by Hall by Room (under carpet)
24-25 99421C-17	Plaster ceiling - Gray + white coat	Room 234 above Lay-in ceiling
26 99421C-18	2x4 Lay-in ceiling tile Patch	Room 234 - west side
27 99421C-19	1x1 ceiling Panel	Room 228 - center
28 99421C-20	Plaster wall 1x1 Ceiling tile	Hall by Room 227 (above light)
29 99421C-21	1 1/2 x 1 1/2 Ceiling Panel	Room 229 (" " ")
30 99421C-22	" " " "	Room 227 (" " ")
31 99421C-23	1' x 2' " "	Room 220 (" " ")
32 99421C-24	1' x 2' " "	Room 232 (" " ")
33 99421C-25	Plaster ceiling	Room 233A above ceiling
34 99421C-26	Black Flooring mastic	Room 222 Under carpet
35 99421C-27	Plaster wall	1st Floor Hall by Room 126 (above ceiling)
36 99421C-28	Plaster Ceiling (Remnants)	1st Floor " " " 126 (above Lay-in ceiling)

131000552

RECEIVED

Waterbury State Office Complex - Waterbury, Vermont
Asbestos Inspection - Miscellaneous Locations

FEB 16 2010

February 15, 2010
Page 2 of 2

BY: SA 0943

37	99421C-29	2x4 Lay in ceiling tile - worm grooves	89 North 1 st floor Hall by Room #130
38-39	99421C-30	Plaster wall, Gray + white coats	Bathroom by Room #135, N. wall
	99421C-31		
	99421C-32		
	99421C-33		
	99421C-34		
	99421C-35		
	99421C-36		
	99421C-37		
	99421C-38		
	99421C-39		
	99421C-40		
	99421C-41		
	99421C-42		
	99421C-43		
	99421C-44		
	99421C-45		
	99421C-46		
	99421C-47		
	99421C-48		
	99421C-49		
	99421C-50		
	99421C-51		
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	99421C-55		
	99421C-56		
	99421C-57		
	99421C-58		
	99421C-59		
	99421C-60		

30 Samples
+ Layer

Turnaround Time: by Noon Same Day 24 Hour **48 Hour** 72 Hour 5 day

Point count if asbestos content is found to be less than 2%

Relinquished by:

Date: 2/15/10

**EMSL Analytical, Inc.**

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontaslab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 03/02/10 10:30 AM
EMSL Order: 041004062

Fax: Phone: (802) 888-1936
Project: **651067/ WATERBURY STATE OFFICE COMPLEX,**
WATERBURY, VT

EMSL Proj:
Analysis Date: 3/4/2010

**Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116. Quantitation
using 400 Point Count Procedure.**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
651067-3 041004062-0003	8-9 NORTH 1ST FLOOR-RM 120- AROVF I AY IN	Gray Fibrous Heterogeneous	2.00% Cellulose	98.00% Non-fibrous (other)	<0.25% Chrysotile
651067-4 041004062-0004	8-9 NORTH 1ST FLOOR-RM 123- AROVF I AY IN	Gray Fibrous Heterogeneous	2.00% Cellulose	98.00% Non-fibrous (other)	<0.25% Chrysotile
651067-5 041004062-0005	8-9 NORTH 1ST FLOOR-RM 129- AROVF I AY IN	Gray Fibrous Heterogeneous	3.00% Cellulose	97.00% Non-fibrous (other)	<0.25% Chrysotile
651067-8 041004062-0008	8-9 NORTH 1ST FLOOR-RM 133- AROVF I AY IN	Gray Fibrous Heterogeneous	2.00% Cellulose	98.00% Non-fibrous (other)	<0.25% Chrysotile

CERTIFICATION# PB278780

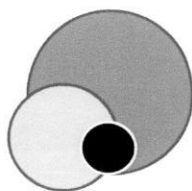
Analyst(s)

Chris Little (4)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. 107 Haddon Ave., Westmont NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 04006



Crothers Environmental Group, LLC

24 Langdell Road
Morrisville, Vermont 05661
Phone 802-888-1936
info@crothersenvironmental.com

041004062

CHAIN OF CUSTODY "ASBESTOS" VERMONT SAMPLES

To: **EMSL Analytical**
107 Haddon Ave
Westmont, NJ 08108

Date Samples Collected: February 27, 2010
Account Representative: Ellen Podell
Samples Collected By: ~~David~~ Crothers
Chris

CEG Project No.: 651067 Project Name: Waterbury State Office Complex – Waterbury, Vermont
Work Area:

E-Mail Results to: chris@crothersenvironmental.com

Analysis Requested: Polarized Light Microscopy

Method of Shipment: FedEx

Sample #	Sample Description, Homogenous Area	Sample Location
651067-1	Plaster Ceiling Remnants	8-9 North - 1st Floor - Room #121- Above Layin calkey
651067-2		
651067-3		Hall by Room #123 -
651067-4		Room #120
651067-5		Room 123
651067-6		Room 129
651067-7		Room 132
651067-8		Hall by Room 131
651067-9		Room 133
651067-10	8 Samples	
651067-11		
651067-12	Point Count is asbestos content is 2% or less	
651067-13		
651067-14	R. Chi. Galt	
651067-15	2/27/10	
651067-16		
651067-17		
651067-18		
651067-19		
651067-20		
651067-21		
651067-22		

SAMPLES ACCEPTED
 FOR ANALYSIS BY
 EMSL ANALYTICAL INC
 WESTMONT, NJ
 RECEIVED
 10 MAR -2 AM 11:30

Recd - DM - PK - 1030A 3-2-10

Pullman, Daniel

041004062

From: Chris Crothers [chris@crothersenvironmental.com]
Sent: Tuesday, March 02, 2010 12:55 PM
To: Pullman, Daniel
Subject: RE: 651067 WATERBURY STATE OFFICE COMPLEX

Sorry Daniel,

72 hour TAT for the 8 PLM samples for 651067 WATERBURY STATE OFFICE COMPLEX

Thanks for getting in touch with me.

Chris Crothers

From: Pullman, Daniel [mailto:dpullman@EMSL.com]
Sent: Tuesday, March 02, 2010 12:21 PM
To: 'chris@crothersenvironmental.com'
Subject: 651067 WATERBURY STATE OFFICE COMPLEX

Chris,

Please provide a turnaround time for the attached project. If you have any questions please let me know.

Thank you,

Dan Pullman, Login Supervisor

EMSL Analytical, Inc.

107 Haddon Avenue Westmont, NJ 08108
(800) 220-3675 Ext.1250 (856) 858-4960 fax



www.emsl.com